## Technical Work Group of the Imperial Valley Study Group Minutes of August 4, 2005 Meeting

In attendance: Mark Etherton, IID; John Kyei, CA ISO; Robert Jackson, SDG&E; Mohan Kondragunta, Phil Leung, SCE; Dale Stevens, CalEnergy; Dave Olsen, CEERT/CEC; Jim Kritikson, for Coral Power; Ron Davis, consultant to CEC. José Santamaria/CFE reported after the meeting that he was unable to call in from Mexico using the number provided. SDG&E will investigate and resolve. The meeting convened at 2:00 PM and adjourned at 3:35 PM. Minutes were recorded by Dave Olsen.

**Minutes** of the July 21, 2005 TWG meeting were approved.

**Production Simulations**: John reported that he has completed the benchmark case for 2010 and the Alternative 2 production simulation, using the new SSG-WI base case. This includes O&M and start-up/shut down costs; John has also inserted maintenance costs and forced outage rates for the geothermal generating units.

For the Light Autumn 1a cases, we agreed that approximately 3,600 MW should be flowing to Devers on the 500 kV system. John's production simulation of Alt 2 shows 3,400 MW at Devers; this indicates that the simulation is reproducing system flows appropriately.

John noted that the Path 45 rating was being violated in his runs, indicating a shortage of generation (load far outstripping generation) in CFE. Paying the penalty to serve the load skews the production cost for the entire region.

John expects to complete the production simulations for all the Alternatives by our next meeting August 10. (It takes 15-18 hours to run one case for one year). He will report on the savings in production cost, the hours of congestion, and losses.

**Phases 1a/1b Power Flow Study**: SDG&E should have the Phase 1b cases to review at our August 10 meeting (Dave Miller will have preliminary results by August 5). SCE will have Phase 1a results to review on Aug. 10 as well.

For the Phase 1a runs, we agreed that SCE would increase the flow on Path 42 to ~550 MW, and then add 645 MW of new/incremental Imperial Valley generation on top of that. Mark pointed out that Path 42 could also be stressed by reducing load in the IID area and scheduling the excess to SCE.

Robert Jackson reported that SDG&E could not get the Phase 1a Light Autumn case to solve, with 1,000 MW of IV generation added (it did solve with 645 MW added). SCE will look at both 645 MW and1,000 MW of generation added in Phase 1a, even though SDG&E could not get the latter to solve. Mark noted that it may be necessary to add the Banister-San Felipe line to get Phase 1a to solve, even though we've previously added that upgrade in Phase 3 of the overall 2,200 MW build-out.

**TWG Final Report**: We made the following assignments for adding to the draft report on our transmission planning studies:

- Chapter 3, §3.1, Selection of Initial Export Path Study Alternatives: Robert Jackson will edit and strengthen.
- §3.2.3, Contingencies: Mohan will write a draft by 8/19.
- §3.2.4, Power Flow/Preliminary Findings: Mark will edit the Heavy Summer findings and add Light Autumn findings.
- §3.3, Selection of Final Alternatives for Further Study: Dale Stevens.
- §3.4, Stability Studies: Mark Etherton.
- §3.5, Post-Transient Analysis: Robert Jackson will explain how/what we studied.
- §3.6, Production Simulations: John Kyei will draft this section.
- §3.7, Study of Phases 1-2: Dale Stevens will draft.
- §3.8, Limitations of the conceptual plan; further studies necessary: Mohan will draft by 8/19.

## Agenda for the next meeting, August 10:

- 1. Approve minutes of our August 4, 2005 meeting.
- 2. Review production simulations of Alts 2, 2a, 3b and 5 and compare their relative savings in production cost, congestion hours and losses.
- 3. Review power flows of Phase 1a and Phase 1b.
- 4. Recommend how to structure the phasing to the IVSG Steering Committee.
- 5. Add to the draft of the TWG report:
  - Review/approve sections already written.
  - Outline Chapter 4, Impact of the Plan on the Regional Grid, and assign sections of this chapter to be written.
  - Identify maps and diagrams to be included, and assign people to provide them.
  - Agree on the content and structure of the appendices which will include the results of our technical studies.

## **Next Meetings:**

**August 10**, 9:00 AM - 3:30 PM. In-person meeting, Sempra HQ Auditorium #1(101 Ash Street, San Diego). This is the day after the STEP meeting on Aug. 9.

August 25, 2:00-4:00 PM, phone meeting. Merrie Lamb will send call-in numbers.

**September 1**, 2:00-4:00 PM, phone meeting. US toll-free: 1-877-842-5648; passcode #737571. Mexico toll-free call-in: 958002151724.